FOREWORD

To assist you in your sales and service activities, this manual explains the main characteristics of the 2003 model year vehicles, in particular providing a technical explanation of the construction and operation of new mechanisms and new technology used.

CAUTION, NOTICE, ***REFERENCE*** and **NOTE** are used in the following ways:

CAUTION	A potentially hazardous situation which could result in injury to people may occur if instructions on what to do or not do are ignored.
NOTICE	Damage to the vehicle or components may occur if instructions on what to do or not do are ignored.
REFERENCE	Explains the theory behind mechanisms and techniques.
NOTE	Notes or comments not included under the above 3 titles.

All information contained herein is the most up-to-date at the time of publication. We reserve the right to make changes without prior notice.

TOYOTA MOTOR CORPORATION

First Printing: Jul. 31, 2002 01-020731-00

MODEL CODE

ACV30 L - A E M N K A

1 2 3 4 5 6 7 8

	BASIC MODEL CODE
1	ACV30: With 2AZ-FE Engine MCV30: With 1MZ-FE Engine

	STEERING WHEEL POSITION
2	L: Left-Hand Drive

	MODEL NAME
3	A: Camry (Produced TMC *1) C: Camry (Produced TMMK *2)

	BODY TYPE
4	E: 4-Door Sedan

	GEAR SHIFT TYPE
5	M: 5-Speed Manual P: 4-Speed Automatic

	GRADE
6	N: LE G: XLE S: SE

	ENGINE SPECIFICATION
7	K: DOHC and SFI

	DESTINATION
8	A: U.S.A. and Canada

*1 TMC : Toyota Motor Corporation

*2 TMMK : Toyota Motor Manufacturing, kentucky, Inc.

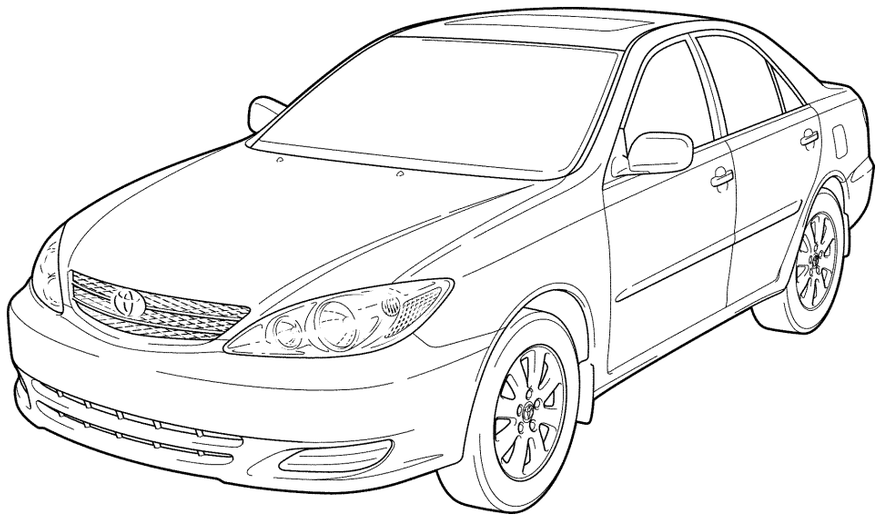
This Camry New Car Features Explains the features of Camrys manufactured by TMC. Specifications of Camrys manufactured TMMK are basically the same as those of TMC.

MODEL LINE-UP

DESTINATION	ENGINE	BODY TYPE	GRADE	TRANSAXLE		
				5-Speed Manual	4-Speed Automatic	
				E351	U241E	U140E
U.S.A. and Canada	2AZ-FE	4-Door Sedan	LE	ACV30L-AEMNKA	ACV30L-AEPNKA ACV30L-CEPNKA	—
			XLE	—	ACV30L-AEPGKA ACV30L-CEPGKA	—
			SE	ACV30L-AEMSKA	ACV30L-AEPSKA ACV30L-CEPSKA	—
	1MZ-FE		LE	—	—	MCV30L-AEPNKA MCV30L-CEPNKA
			XLE	—	—	MCV30L-AEPGKA MCV30L-CEPGKA
			SE	—	—	MCV30L-AEPSKA MCV30L-CEPSKA

CAMRY

3



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CAMRY

OUTLINE OF NEW FEATURES

The following changes have been made for the 2003 model year.

1. 2AZ-FE & 1MZ-FE Engines

To comply with the OBD-II regulations, all the DTC (Diagnostic Trouble Code) have been made to correspond to the SAE controlled codes. Some of the DTC have been further divided into smaller detection areas than in the past, and new DTC have been assigned to them.
For details, see the 2003 General Features section.

2. Power Adjustable Pedals System (only for Automatic Transaxle Model)

Power adjustable pedals system has been adopted as optional equipment for the automatic transaxle model.

NEW FEATURES

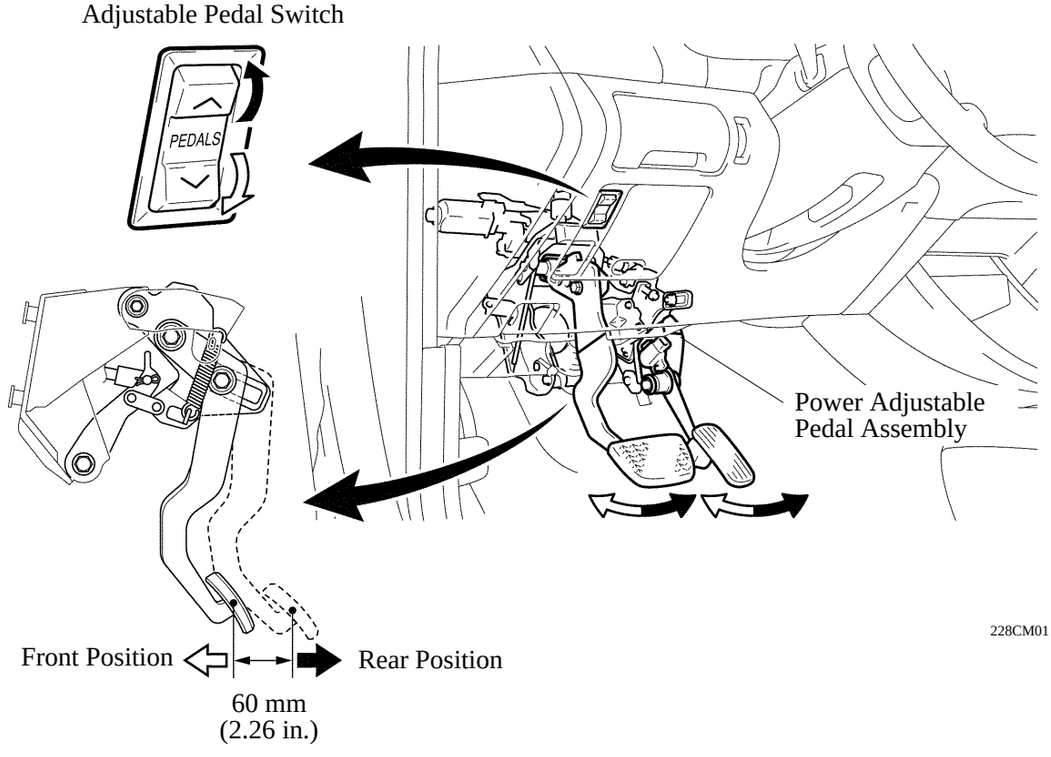
■POWER ADJUSTABLE PEDALS SYSTEM

1. General

- This system enables the driver to adjust the position of the accelerator and brake pedals simply and simultaneously by using an adjustable pedal switch. The range is 60 mm (2.36 in.), thus, widening the range of driving position and improving the comfort.
- The brake pedal assembly is used a double-link type.
- This system will function when the following two condition are satisfied.

  a) Ignition switch ON position

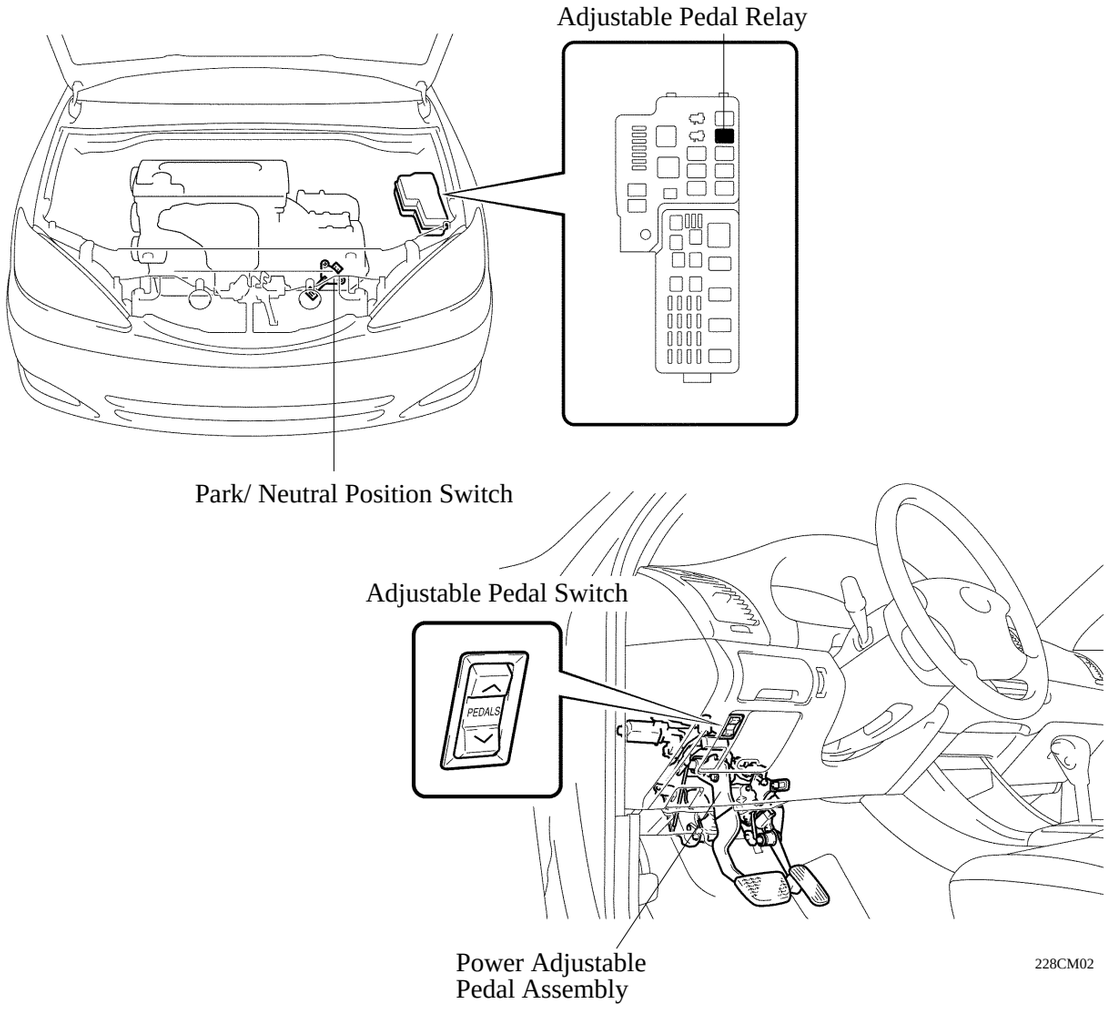
  b) Shift position P



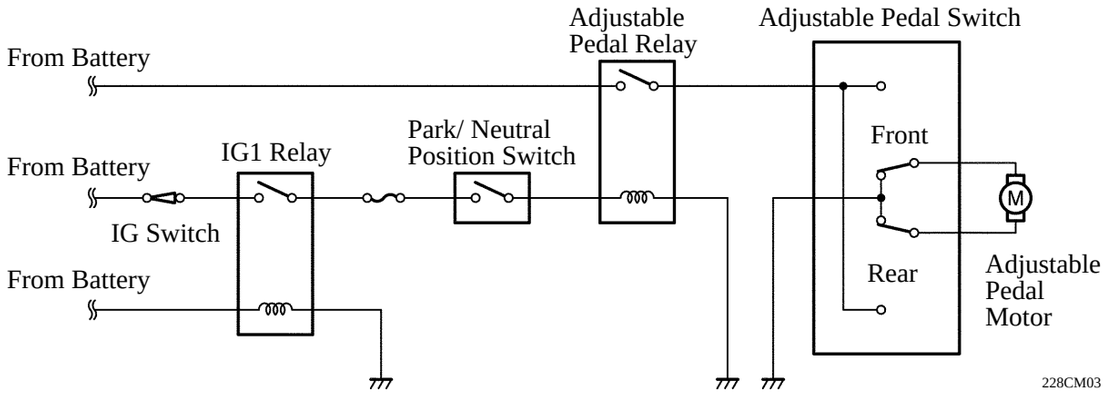
Service Tip

- Brake pedal position must be in front most position when measuring its height. Adjustment method is same as the usual fixed type brake pedal. For details, refer to 2003 Camry Repair Manual (Pub. No. RM972U).
  Basic Brake Pedal Height from asphalt sheet: 144.1 - 154.1 mm (5.673 - 6.067 in.)
- It is not possible to move the brake pedal and accelerator pedal separately.

2. Layout of Main Component

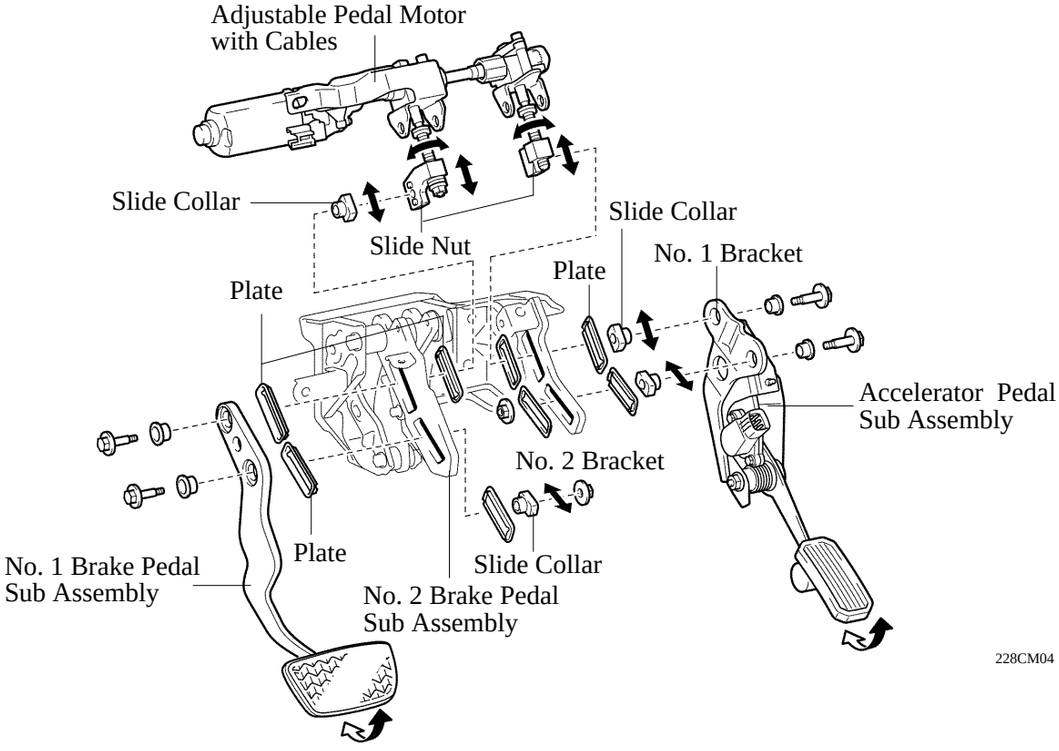


3. Wiring Diagram

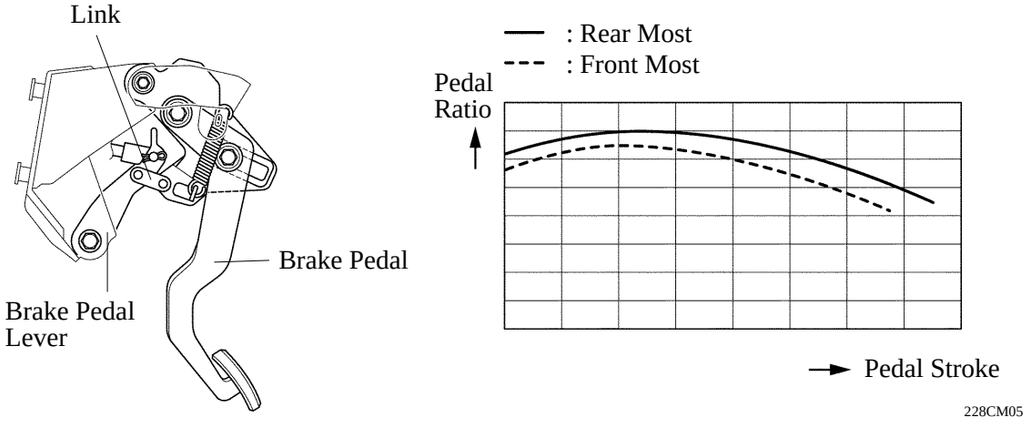


4. Construction and Operation

- Power adjustable pedal assembly mainly consists of the accelerator pedal assembly, brake pedal assembly and adjustable motor with cables.
- Brake pedal assembly consists of No.1 brake pedal sub assembly and No.2 brake pedal sub assembly. No.1 brake pedal sub assembly is assembled into No.2 brake pedal sub assembly through 4 plate and 2 slide collars.
- Accelerator pedal assembly consists of accelerator pedal sub assembly and 2 (No.1 and No.2) brackets.
- When the adjustable pedal motor rotates, the assembled slide nut moves up and down.



- When the pedal stroke is small or medium, the lever ratio is increased in order to reduce the pedal effort.
- When the pedal stroke is large, the pedal ratio is decreased to provide ample pedal response.



MAJOR TECHNICAL SPECIFICATIONS

Item / Area			U.S.A. and Canada			
Body Type			4-Door Sedan			
Vehicle Grade			LE		XLE	SE
Model Code			ACV30L-AEMNKA	ACV30L-A (C) EPNKA	ACV30L-A (C) EPGKA	ACV30L-AEMSKA
Major Dimensions & Vehicle Weights	Overall	Length mm (in.)	4805 (189.2)	4805 (189.2)	4805 (189.2)	4805 (189.2)
		Width mm (in.)	1795 (70.7)	1795 (70.7)	1795 (70.7)	1795 (70.7)
		Height* mm (in.)	1490 (58.7)	1490 (58.7)	1490 (58.7)	1490 (58.7)
	Wheel Base	mm (in.)	2720 (107.1)	2720 (107.1)	2720 (107.1)	2720 (107.1)
	Tread	Front mm (in.)	1545 (60.8)	1545 (60.8)	1545 (60.8)	1545 (60.8)
		Rear mm (in.)	1535 (60.4)	1535 (60.4)	1535 (60.4)	1535 (60.4)
	Effective Head Room	Front mm (in.)	995 (39.2)	995 (39.2)	995 (39.2)	995 (39.2)
		Rear mm (in.)	975 (38.4)	975 (38.4)	975 (38.4)	975 (38.4)
	Effective Leg Room	Front mm (in.)	1055 (41.5)	1055 (41.5)	1055 (41.5)	1055 (41.5)
		Rear mm (in.)	960 (37.8)	960 (37.8)	960 (37.8)	960 (37.8)
	Shoulder Room	Front mm (in.)	1460 (57.5)	1460 (57.5)	1460 (57.5)	1460 (57.5)
		Rear mm (in.)	1440 (56.7)	1440 (56.7)	1440 (56.7)	1440 (56.7)
	Overhang	Front mm (in.)	945 (37.2)	945 (37.2)	945 (37.2)	945 (37.2)
		Rear mm (in.)	1140 (44.9)	1140 (44.9)	1140 (44.9)	1140 (44.9)
	Min. Running Ground Clearance	mm (in.)	150 (5.9)	150 (5.9)	150 (5.9)	150 (5.9)
	Angle of Approach	degrees	15.2°	15.2°	15.2°	15.2°
	Angle of Departure	degrees	16.6°	16.6°	16.6°	16.6°
	Curb Mass.	Front kg (lb)	825 (1819)	850 (1874)*4, 855 (1885)*5	870 (1918)*4, 875 (1929)*5	835 (1841)
		Rear kg (lb)	585 (1290)	580 (1279)*4 *5	595 (1312)*4 *5	600 (1323)
		Total kg (lb)	1410 (3108)	1430 (3153)*4, 1435 (3164)*5	1465 (3230)*4, 1470 (3241)*5	1435 (3164)
	Gross Vehicle Mass.	Front kg (lb)	960 (2116)	985 (2172)	995 (2194)	965 (2127)
		Rear kg (lb)	920 (2028)	915 (2017)	925 (2039)	935 (2061)
		Total kg (lb)	1880 (4145)	1900 (4189)	1920 (4233)	1900 (4189)
	Fuel Tank Capacity	L (U.S.gal., lmp.gal.)	70 (18.5, 15.4)	70 (18.5, 15.4)	70 (18.5, 15.4)	70 (18.5, 15.4)
	Luggage Compartment Capacity	m^3 (cu.ft.)	14.1 (497.9)	14.1 (497.9)	14.1 (497.9)	14.1 (497.9)
Performance	Max. Speed	km/h (mph)	190 (118)	190 (118)	190 (118)	190 (118)
	Max. Cruising Speed	km/h (mph)	—	—	—	—
	Acceleration	0 to 100 km/h sec.	9.1	9.9	9.9	9.1
		0 to 400 m sec.	—	—	—	—
	Max. Permissible Speed	1st Gear km/h (mph)	52 (32)	64 (40)	65 (41)	53 (33)
		2nd Gear km/h (mph)	89 (55)	115 (71)	118 (73)	92 (57)
		3rd Gear km/h (mph)	137 (85)	—	—	141 (88)
		4th Gear km/h (mph)	189 (117)	—	—	194 (120)
	Turning Diameter (Outside Front)	Wall to Wall m (ft.)	11.4 (37.4)	11.4 (37.4)	12.0 (39.4)	12.0 (39.4)
		Curb to Curb m (ft.)	10.6 (34.8)	10.6 (34.8)	11.2 (36.7)	11.2 (36.7)
Engine	Engine Type		2AZ-FE	2AZ-FE	2AZ-FE	2AZ-FE
	Valve Mechanism		16-Valve, DOHC	16-Valve, DOHC	16-Valve, DOHC	16-Valve, DOHC
	Bore × Stroke	mm (in.)	88.5 × 96.0 (3.48 × 3.78)	88.5 × 96.0 (3.48 × 3.78)	88.5 × 96.0 (3.48 × 3.78)	88.5 × 96.0 (3.48 × 3.78)
	Displacement	cm^3 (cu.in.)	2362 (144.2)	2362 (144.2)	2362 (144.2)	2362 (144.2)
	Compression Ratio		9.6 : 1	9.6 : 1	9.6 : 1	9.6 : 1
	Carburetor Type		SFI	SFI	SFI	SFI
	Research Octane No.	RON	96	96	96	96
	Max. Output (SAE-NET)	kW/rpm (HP@rpm)	117 / 5600 (157@5600)	117 / 5600 (157@5600)	117 / 5600 (157@5600)	117 / 5600 (157@5600)
	Max. Torque (SAE-NET)	N·m/rpm (lb-ft@rpm)	220 / 4000 (162@4000)	220 / 4000 (162@4000)	220 / 4000 (162@4000)	220 / 4000 (162@4000)
Engine Electrical	Battery Capacity (5HR)	Voltage & Amp. hr.	12-48*1, 12-55*2	12-48*1, 12-55*2	12-48*1, 12-55*2	12-48*1, 12-55*2
	Alternator Output	Watts	960	960	960	960
	Starter Output	kW	1.6	1.6	1.6	1.6
Chassis	Clutch Type		Dry, Single Plate Diaphram	—	—	Dry, Single Plate Diaphram
	Transaxle Type		E351	U241E	U241E	E351
	Transmission Gear Ratio	In First	3.538	3.943	3.943	3.538
		In Second	2.045	2.197	2.197	2.045
		In Third	1.333	1.413	1.413	1.333
		In Fourth	0.972	1.020	1.020	0.972
		In Fifth	0.731	—	—	0.731
		In Reverse	3.583	3.145	3.145	3.583
	Counter Gear Ratio		—	—	—	—
	Differential Gear Ratio (Final)		3.944	2.740	2.740	3.944
	Brake Type	Front	Ventilated Disc	Ventilated Disc	Ventilated Disc	Ventilated Disc
		Rear	Drum	Drum	Solid Disc	Solid Disc
	Parking Brake Type		Leading Trailing	Leading Trailing	Duo-Servo	Duo-Servo
	Brake Booster Type and Size	in.	Single10.5”	Single10.5”	Single10.5”	Single10.5”
	Proportioning Valve Type		Dual-P Valve*3	Dual-P Valve*3	—	Dual-P Valve*3
	Suspension Type	Front	MacPherson Strut	MacPherson Strut	MacPherson Strut	MacPherson Strut
		Rear	MacPherson Strut	MacPherson Strut	MacPherson Strut	MacPherson Strut
	Stabilizer Bar	Front	STD	STD	STD	STD
		Rear	STD	STD	STD	STD
	Steering Gear Type		Rack & Pinion	Rack & Pinion	Rack & Pinion	Rack & Pinion
	Steering Gear Ratio (Overall)		15.8 : 1	15.8 : 1	16.0 : 1	16.0 : 1
	Power Steering Type		Integral Type	Integral Type	Integral Type	Integral Type

*1: Set Option without Cold Area Spec.
*2: Set Option with Cold Area Spec.
*3: Without ABS
*4: Produced TMC
*5: Produced TMMK

3

Item / Area			U.S.A. and Canada			
Body Type			4-Door Sedan			
Vehicle Grade			SE	LE	XLE	SE
Model Code			ACV30L-A (C) EPSKA	MCV30L-A (C) EPNKA	MCV30L-A (C) EPGKA	MCV30L-A (C) EPSKA
Major Dimensions & Vehicle Weights	Overall	Length mm (in.)	4805 (189.2)	4805 (189.2)	4805 (189.2)	4805 (189.2)
		Width mm (in.)	1795 (70.7)	1795 (70.7)	1795 (70.7)	1795 (70.7)
		Height* mm (in.)	1490 (58.7)	1490 (58.7)	1490 (58.7)	1490 (58.7)
	Wheel Base	mm (in.)	2720 (107.1)	2720 (107.1)	2720 (107.1)	2720 (107.1)
	Tread	Front mm (in.)	1545 (60.8)	1545 (60.8)	1545 (60.8)	1545 (60.8)
		Rear mm (in.)	1535 (60.4)	1535 (60.4)	1535 (60.4)	1535 (60.4)
	Effective Head Room	Front mm (in.)	995 (39.2)	995 (39.2)	995 (39.2)	995 (39.2)
		Rear mm (in.)	975 (38.4)	975 (38.4)	975 (38.4)	975 (38.4)
	Effective Leg Room	Front mm (in.)	1055 (41.5)	1055 (41.5)	1055 (41.5)	1055 (41.5)
		Rear mm (in.)	960 (37.8)	960 (37.8)	960 (37.8)	960 (37.8)
	Shoulder Room	Front mm (in.)	1460 (57.5)	1460 (57.5)	1460 (57.5)	1460 (57.5)
		Rear mm (in.)	1440 (56.7)	1440 (56.7)	1440 (56.7)	1440 (56.7)
	Overhang	Front mm (in.)	945 (37.2)	945 (37.2)	945 (37.2)	945 (37.2)
		Rear mm (in.)	1140 (44.9)	1140 (44.9)	1140 (44.9)	1140 (44.9)
	Min. Running Ground Clearance	mm (in.)	150 (5.9)	150 (5.9)	150 (5.9)	150 (5.9)
	Angle of Approach	degrees	15.2°	15.2°	15.2°	15.2°
	Angle of Departure	degrees	16.6°	16.6°	16.6°	16.6°
	Curb Mass.	Front kg (lb)	860 (1896)*4, 865 (1907)*5	920 (2028)*4, 925 (2039)*5	935 (2061)*4, 940 (2072)*5	930 (2050)*4, 935 (2061)*5
		Rear kg (lb)	590 (1301)*4 *5	580 (1279)*4 *5	595 (1312)*4 *5	590 (1301)*4 *5
		Total kg (lb)	1450 (3197)*4, 1455 (3208)*5	1500 (3307)*4, 1505 (3318)*5	1530 (3373)*4, 1535 (3384)*5	1520 (3351)*4, 1525 (3362)*5
	Gross Vehicle Mass.	Front kg (lb)	995 (2194)	1065 (2348)	1080 (2381)	1080 (2381)
		Rear kg (lb)	925 (2039)	920 (2028)	935 (2061)	935 (2061)
		Total kg (lb)	1920 (4233)	1985 (4376)	2015 (4442)	2015 (4442)
	Fuel Tank Capacity	L (U.S.gal., Imp.gal.)	70 (18.5, 15.4)	70 (18.5, 15.4)	70 (18.5, 15.4)	70 (18.5, 15.4)
	Luggage Compartment Capacity	m^3 (cu.ft.)	14.1 (497.9)	14.1 (497.9)	14.1 (497.9)	14.1 (497.9)
Performance	Max. Speed	km/h (mph)	—	—	—	—
	Max. Cruising Speed	km/h (mph)	—	—	—	—
	Acceleration	0 to 100 km/h sec.	9.9	8.3	8.3	8.3
		0 to 400 m sec.	—	—	—	—
	Max. Permissible Speed	1st Gear km/h (mph)	65 (41)	64 (40)	66 (41)	66 (41)
		2nd Gear km/h (mph)	118 (73)	116 (72)	119 (74)	119 (74)
		3rd Gear km/h (mph)	—	—	—	—
		4th Gear km/h (mph)	—	—	—	—
	Turning Diameter (Outside Front)	Wall to Wall m (ft.)	12.0 (39.4)	11.4 (37.4)	12.0 (39.4)	12.0 (39.4)
		Curb to Curb m (ft.)	11.2 (36.7)	10.6 (34.8)	11.2 (36.7)	11.2 (36.7)
Engine	Engine Type		2AZ-FE	1MZ-FE	1MZ-FE	1MZ-FE
	Valve Mechanism		16-Valve, DOHC	24-Valve, DOHC	24-Valve, DOHC	24-Valve, DOHC
	Bore × Stroke	mm (in.)	88.5 × 96.0 (3.48 × 3.78)	87.5 × 83.0 (3.44 × 3.27)	87.5 × 83.0 (3.44 × 3.27)	87.5 × 83.0 (3.44 × 3.27)
	Displacement	cm^3 (cu.in.)	2362 (144.2)	2995 (182.8)	2995 (182.8)	2995 (182.8)
	Compression Ratio		9.6 : 1	10.5 : 1	10.5 : 1	10.5 : 1
	Carburetor Type		SFI	SFI	SFI	SFI
	Research Octane No.	RON	96	96	96	96
	Max. Output (SAE-NET)	kW/rpm (HP@rpm)	117 / 5600 (157@5600)	143 / 5300 (192@5300)	143 / 5300 (192@5300)	143 / 5300 (192@5300)
	Max. Torque (SAE-NET)	N·m/rpm (lb-ft@rpm)	220 / 4000 (162@4000)	283 / 4400 (209@4400)	283 / 4400 (209@4400)	283 / 4400 (209@4400)
Engine Electrical	Battery Capacity (5HR)	Voltage & Amp. hr.	12-48*1, 12-55*2	12-48*1, 12-55*2	12-48*1, 12-55*2	12-48*1, 12-55*2
	Alternator Output	Watts	960	1200	1200	1200
	Starter Output	kW	1.6	1.6	1.6	1.6
Chassis	Clutch Type		—	—	—	—
	Transaxle Type		U241E	U140E	U140E	U140E
	Transmission Gear Ratio	In First	3.943	3.938	3.938	3.938
		In Second	2.197	2.194	2.194	2.194
		In Third	1.413	1.411	1.411	1.411
		In Fourth	1.020	1.019	1.019	1.019
		In Fifth	—	—	—	—
		In Reverse	3.145	3.141	3.141	3.141
	Counter Gear Ratio		—	—	—	—
	Differential Gear Ratio (Final)		2.740	2.814	2.814	2.814
	Brake Type	Front	Ventilated Disc	Ventilated Disc	Ventilated Disc	Ventilated Disc
		Rear	Solid Disc	Solid Disc	Solid Disc	Solid Disc
	Parking Brake Type		Duo-Servo	Duo-Servo	Duo-Servo	Duo-Servo
	Brake Booster Type and Size	in.	Single10.5”	Single10.5”	Single10.5”	Single10.5”
	Proportioning Valve Type		Dual-P Valve*3	Dual-P Valve*3	—	—
	Suspension Type	Front	MacPherson Strut	MacPherson Strut	MacPherson Strut	MacPherson Strut
		Rear	MacPherson Strut	MacPherson Strut	MacPherson Strut	MacPherson Strut
	Stabilizer Bar	Front	STD	STD	STD	STD
		Rear	STD	STD	STD	STD
	Steering Gear Type		Rack & Pinion	Rack & Pinion	Rack & Pinion	Rack & Pinion
	Steering Gear Ratio (Overall)		16.0 : 1	15.8 : 1	16.0 : 1	16.0 : 1
	Power Steering Type		Integral Type	Integral Type	Integral Type	Integral Type

*1: Set Option without Cold Area Spec.
*2: Set Option with Cold Area Spec.
*3: Without ABS
*4: Produced TMC
*5: Produced TMMK